

Subject Index to Volume 20

A

Acetoacetate, 3-¹³C-labeled, ketogenesis and sepsis, E665
 Acetylglutamine, metabolism, parenteral nutrition, E228
 ACTH: *see* Adrenocorticotropin
 Adenosine, membrane and intracellular effects, pancreatic β -cells, E473
 Adenosine monophosphate, cyclic β -endorphin and islet hormone release, E361
 fatty acids, steroidogenesis and, Leydig cells, E937
 insulin release and, pancreas (chicken), E15
 lung, stretch-related changes, after partial pneumonectomy, E261
 prolactin, lactose biosynthesis and, E318
 sex hormones, bone conservation and, E903
 uptake, inflation-associated increases, lung, E729
 Adenosine triphosphate, utilization, skeletal muscle during tetanic contraction, E595
 Adenylate cyclase
 β -adrenergic receptor, during sodium restriction, E499
 catalytic, new form of pseudohypoparathyroidism, E277
 lipolysis and, α_1 -adenosine receptor-mediated inhibition, adipocytes, E871
 Adipocytes
 adenylate cyclase and lipolysis, α_1 -adenosine receptor-mediated inhibition, E871
 glucose transporters in, exercise training effects, E520
 regression, diabetes and, E547
 Adipose tissue
 brown: *see* Brown fat
 white
 regression, diabetes, E547
 ventrolateral hypothalamic obesity, E255
 Adrenal cortex, enhanced response to corticosterone, genetic obesity, E133
 Adrenalectomy
 enhanced response to corticosterone, genetic obesity, E133
 glutamate treatment and, prevention of obesity, E139
 Adrenal medulla, secretory proteins, calcium interaction with, E247
 Adrenocorticotropin, response to corticotropin-releasing factor, cold adaptation and, E336
 Aging
 diminished response to epinephrine, ANF and, E866
 metabolic rate and, food restriction effects, E175
 muscle fiber-type composition, E823
 Alanine, metabolism, parenteral nutrition, E228
 Aldosterone
 ANF and, salt-depleted state, E583

secretion, dopamine antagonism effects, E588
 Alkalosis, metabolic, effects on calcium, PTH, and vitamin D₃, E578
 Amino acids
 arteriovenous differences, liver and placenta, fetus (lamb), E909
 insulin suppression and, whole body proteolysis, E839
 metabolism, reciprocal pool model, E385
 studies, whole body protein synthesis and, E639
 translocation, γ -glutamyl cycle in regulation of, E916
 transport, insulin resistance of, skeletal muscle, E418
 Ammonia, metabolism, liver and placenta, fetus (lamb), E909
 Ammonogenesis, glutamine synthesis and, liver, during fasting, E514
 Ammonium ions
 ATP utilization, skeletal muscle during tetanic contraction, E595
 glutamine synthesis and, liver, during fasting, E514
 Amniotic fluid, vasopressin metabolism in, trypsinlike enzyme and (guinea pig), E354
 Anesthesia, epidural, exercise effects, E95
 ANF: *see* Atrial natriuretic factor
 Angiotensin-converting enzyme, ketamine and fentanyl effects, lung metabolism, E379
 Angiotensin II
 placental response to, fetus (sheep), E102
 regulation, salt-depleted state, E583
 vasopressin interaction and, prostacyclin synthesis, vascular smooth muscle cells, E617
 Angiotensinogen, plasma, stimulation by dexamethasone, E879
 ANH: *see* Atrial natriuretic hormone
 ANP: *see* Atrial natriuretic peptide
 Antidiuretic hormone: *see also* Vasopressin
 fluorescent vasotocin analogues (toad), E804
 Arachidonic acid, membrane ionic conductance and, pituitary cells, E203
 ATP: *see* Adenosine triphosphate
 Atrial natriuretic factor
 diminished response to epinephrine, elderly, E866
 neural stimulation of renin release and, E332
 plasma, hyperosmolality effects, fetus (sheep), E466
 Atrial natriuretic hormone, aldosterone and, salt-depleted state, E583
 Atrial natriuretic peptide
 neural stimulation and, renin release, E332
 response, central osmotic stimulation, E611
 submandibular gland synthesis, cGMP secretion and, E675
 Awake state, renin release, plasma epinephrine concentration effects, E57

B

Bicarbonate
 carbon dioxide recovery in breath, feeding effects, E426
 glycogen pathways and, hepatic, E145, E158
 Bladder, fluorescent vasotocin analogues (toad), E804
 Blockade
 β -adrenergic, lipolysis during fasting, E65
 sensory nervous, responses to exercise and, E95
 Blood, constituents: *see* specific constituent
 Blood flow: *see also* Circulation
 glucose transport, forearm, compartmental model, E943
 umbilical-placental, prostacyclin and angiotensin effects (sheep), E102
 Blood pressure
 arterial, epinephrine and renin secretion, awake state, E57
 response, central osmotic stimulation, E611
 Body
 composition, overfeeding in offspring of obese patients, E647
 weight: *see* Weight
 Bone
 normal weight bearing, after skeletal unloading, E606
 sex hormones and, calcitonin and parathyroid hormone deficiency, E903
 surface elements, ion microprobe analysis, 815
 Brain, synaptosomes, sodium-potassium-ATPase differences, E284
 Brown fat
 enhanced response to corticosterone, genetic obesity, E133
 obesity, adrenalectomy prevention of, E139
 sympathetic nerve activities, tube feeding effects, E374
 thermogenic and trophic responses to cold, thyroxine role in, E81
 Burns, mediating protein catabolism in, insulin and glucose role in, E323

C

Calcitonin
 calcitonin gene-related peptide and, renal effects, E848
 sex hormones, bone conservation and, E903
 Calcitonin gene-related peptide, calcitonin and, renal effects, E848
 Calcium
 blood ionized, chronic metabolic alkalosis, E578
 cellular, adenine nucleotide inhibition of, E505
 β -endorphin and islet hormone release, E361
 fatty acids, steroidogenesis and, Leydig cells, E937

Calcium (*continued*)
 interaction, adrenal secretory proteins, E247
 ion microprobe analysis, bone, E815
 metabolic alkalosis effects, E578
 oral, vitamin D metabolism and, E632
 uptake, norepinephrine inhibition of, islet, E923
 Calcium channel blockers, vitamin D metabolism and, E632
 Calcium ions, intracellular, arachidonic acid effects, pituitary cells, E203
 Calorimetry
 indirect
 dopamine effects, healthy men, E541
 glucocorticosteroid effects, E712
 glucose-stimulated insulin secretion, bed rest effects, E43
 overfeeding in offspring of obese patients, E647
 time-dependent FFA-glucose interaction, E49
 cAMP: *see* Adenosine monophosphate, cyclic
 Carbachol, intracerebroventricular, rapid activation of gluconeogenesis after, E486
 Carbohydrates
 overfeeding, protein turnover and, E413
 thermogenesis induced by, epinephrine effects, muscle, E340
 Carbon dioxide
 isotopic dilution, during substrate oxidation studies, E296
 mitochondrial, renal glucose synthesis, E791
 recovery in breath, feeding effects, E426
 Carbonic anhydrase, mitochondrial, renal glucose synthesis, E791
 Cardiac output, dopamine effects, oxygen consumption, healthy men, E541
 Cardiomyocytes
 diabetic, phosphorylase synthesis in, E74
 plasma membrane-specific deficiency, diabetes, E127
 Cardiomyopathy
 diabetic
 cardiac β -adrenergic receptors in, E127
 creatine kinase enzyme activity and mRNA level, E573
 Catecholamines
 blood glucose turnover and, during exercise, E405
 carbohydrate-induced thermogenesis and, skeletal muscle, E340
 conjugated, response to hypoxia, fetus (sheep), E198
 hormonal responses, exercise, E95
 kinetics, plasma clearance and, E743
 plasma
 increase in concentration, renin release and, awake state, E57
 oxygen consumption and, healthy men, E541
 Catheterization, cardiac, pacing stress effects, E309
 Central nervous system, osmotic system, vasopressin, ANP, and blood pressure response, E611
 cGMP: *see* Guanosine monophosphate, cyclic
 Chloride, excretion, calcitonin and calcitonin gene-related peptide, E848

Chloroquine, release, after exercise, soleus muscle, E1
 Cholesterol, metabolism, vitamin D₃-induced changes, monocyte-macrophages, E290
 Chromatography
 gas, glycogenosis type I and II children, E346
 high-pressure liquid, vasopressin metabolism by trypsinlike enzyme, amniotic fluid, E354
 Chromogranin A, adrenal, calcium interaction with, E247
 Chylomicrons, serum triglycerides, after acute triglyceride administration, E860
 Circadian rhythm: *see* Rhythm
 Circulation: *see also* Blood flow
 pulmonary, inflation-associated increases, E729
 Cold
 acclimation, ACTH response to CRF and, E336
 brown fat responses to, thyroxine effects, E81
 Collagen, synthesis, skeletal muscle hypertrophy, E885
 Colon, proximal, epithelial cell apical membranes, IGF-I receptors on, E27
 Coronary hemodynamics, myocardial metabolism and, pacing stress, E309
 Corticosterone
 enhanced acute response, genetic obesity, E133
 obesity, adrenalectomy prevention of, E139
 Corticotropin-releasing factor
 ACTH response to, cold acclimation and, E336
 response to hypoglycemia, brain-pituitary-adrenal, E757
 Cortisol
 glucose counterregulation and, during hypoglycemia, E35
 secretory burst, circadian glucocorticoid rhythm, E6
 Creatine kinase, enzyme activity, diabetes effects, heart, E573
 CRF: *see* Corticotropin-releasing factor
 Cycloheximide, synthesis, insulin resistance of, skeletal muscle, E418
 Cytochalasin, metabolism, training effects, adipose cells, E520
 Cytochalasin B, binding, insulin-resistant uremia, E193

D

Deconvolution, cortisol secretion, circadian glucocorticoid rhythm, E6
 2-Deoxyglucose, uptake, tube feeding, brown fat, E374
 Deoxyribonucleic acid, diabetes, white adipose tissue regression, E547
 Development: *see also* Growth
 hypoglycemia, brain-pituitary-adrenal response to, E757
 muscle fiber-type composition, E823
 Dexamethasone, stimulation, plasma inactive renin, E879
 Diabetes
 α -adrenoceptors and insulin release, pancreatic islets, E439
 creatine kinase enzyme activity and mRNA level, heart, E573

impaired production of nerve growth factor, submandibular gland, E400
 insulin action in, sepsis-induced changes, E301
 phosphorylase synthesis in, hepatocytes and cardiomyocytes, E74
 streptozotocin, plasma membrane-specific deficiency in β -adrenergic receptors, E127
 type II, glucose output, liver, E531
 white adipose tissue regression in, E547
 1,25-Dihydroxyvitamin D₃: *see* Vitamin D₃
 Dipeptides, metabolism, parenteral nutrition, E228
 Domperidone, aldosterone secretion and, E588
 Dopamine
 antagonism, central and peripheral, aldosterone secretion and, E588
 oxygen consumption and delivery, healthy men, E541
 Dose-response relations, plasma glucose and insulin secretion, bed rest effects, E43

E

Endocrine signals, episodic, false-positive and false-negative errors, E88
 Endocytosis, insulin degradation, kidney epithelial cells (opossum), E895
 Endorphin, insulin-induced hypoglycemia and, naloxone effects, E367
 β -Endorphin, islet hormone release and, E361
 Endothelial cells, regression, diabetes and, E547
 Endothelin, inhibitory effect, renin release, E833
 Endothelin-1, activation, phospholipase C and calcium, osteoblastic cells, E797
 Energy
 expenditure
 catecholamine effects, skeletal muscle, E340
 overfeeding in offspring of obese patients, E647
 metabolism, skeletal muscle fiber-type, E567
 Enzyme: *see also* specific enzyme activities, skeletal muscle fiber-type, E567
 Epinephrine
 carbohydrate-induced thermogenesis and, skeletal muscle, E340
 conjugated, response to hypoxia, fetus (sheep), E198
 hormonal responses, exercise, E95
 insulin-induced hypoglycemia and, naloxone effects, E367
 metabolism, motor center activity and, E722
 plasma, increase in concentration, renin release and, awake state, E57
 response to, ANF effects, elderly, E866
 thermogenesis, plasma insulin or glucagon changes and, E185
 Estrogen
 bone and, calcitonin and parathyroid hormone deficiency, E903
 brain sodium-potassium-ATPase differences, male-female, E284
 desensitization of, myometrium, E20
 Ethanol, consumption, during pregnancy, E561

Euglycemic-hyperinsulinemic clamp
development of obesity, ventrolateral hy-
pothalamic, E255
insulin secretion and action, hypergly-
cemia, E180

Exercise

endurance training, lactate clearance
and, hyperlactatemia, E782
glucagon rise induced by, hepatic glyco-
genolysis and gluconeogenesis, E108
high- and low-intensity, blood glucose
turnover during, E405
hormonal and metabolic responses to,
sensory nervous blockade and, E95
mobilization of glucoregulatory hor-
mones and glucose, hypothalamic lo-
comotor centers and, E722
pancreatic hormone secretion, hepatic
vagus nerve effects, E855
protein degradation after, soleus muscle,
E1
training
 β -adrenoceptor density and, skeletal
 muscle, E736
 glucose transporters and, adipose cells,
 E520
work: see Work

F

Fasting

glutamine synthesis during, ammonium
ion effects, liver, E514
leucine oxidation, glucocorticosteroid ef-
fects, E712
lipolysis during, β -adrenergic blockade
effects, E65

Fatty acids

free
 glucose interaction, time dependence
 of, E49
 ketogenesis and sepsis, E665
 nonesterified, steroidogenesis in Leydig
 cells and, E937
 nonesterified free, insulin effects, gilts
 (pig), E554

Feeding

carbon dioxide recovery in breath and,
E426
diet, basal metabolic rate and, E175
dietary calcium, vitamin D metabolism
and, E632
dietary protein intake, insulin action
and, E212
enhanced response to corticosterone, ge-
netic obesity, E133
food restriction, transient reduction of
metabolic rate by, E175
meal absorption, glucocorticosteroid ef-
fects, E712
overfeeding
 carbohydrates, protein turnover and,
 E413
 energy expenditure in offspring of
 obese patients, E647
 tube, metabolic and sympathetic nerve
 activities, brown fat, E374

Fentanyl, ketamine and, lung metabolism,
E379

Fetal alcohol syndrome, ethanol effects on
hormone concentrations, pregnancy,
E561

Fetus: see also Lactation; Placenta;

Pregnancy
 amino acid arteriovenous differences,
 liver and placenta (lamb), E909

brown fat, thyroid hormone and 5'-de-
dinase activity, E625

hypoxia, conjugated catecholamine re-
sponse to (sheep), E198

plasma ANF, hyperosmolality effects
(sheep), E466

response to prostacyclin, after angioten-
sin II-induced vasoconstriction
(sheep), E102

vasopressin clearance, trypsinlike en-
zyme and, E354

FFA: see Fatty acids, free

Fibroblasts, insulin receptors, radio-
immunoassay, E451

Fluid, amniotic: see Amniotic fluid

Fluoride, cellular calcium and PTH, aden-
ine nucleotides and, E505

Follicle-stimulating hormone, control of
menstrual cycle, E930

Forskolin

abnormal adenylate cyclase, pseudohy-
poparathyroidism, E277

cAMP changes, lung stretch and, E261

Free hormone hypothesis, thyroxine trans-
port, liver, E764

Fura-2, cellular calcium and PTH, adenine
nucleotides and, E505

G

Gas, exchange, during exercise, E405

Gastrin-releasing peptide, antagonist, E235

Genetic diseases, pseudohypoparathyroid-
ism, abnormal adenylate cyclase,
E277

Genital tract, female, neuropeptide Y ac-
tions in, E220

Glucagon

β -endorphin and islet hormone release,
E361

exercise-induced rise in, hepatic glyco-
genolysis and gluconeogenesis, E108

gastrin-releasing peptides and, E235

metabolism, motor center activity and,
E722

plasma, changes, epinephrine thermo-
genesis and, E185

pulsatile delivery effects, E686

Glucocorticoids

circadian rhythm, cortisol secretory
burst, E6

enhanced response to corticosterone, ge-
netic obesity, E133

stimulation, plasma inactive renin, E879

Glucocorticosteroids, leucine and, E712

Gluconeogenesis
 growth hormone stimulation of, renal
 proximal tubule, E751

 hepatic, exercise-induced glucagon rise
 effects, E108

 lactate clearance and, endurance train-
 ing effects, E782

 liver, dietary protein intake effects, E212

 rapid activation, after intracerebroven-
 tricular carbachol, E486

 sepsis effects, diabetes, E301

Gluconeogenic pool, glucose recycling, gly-
cogenesis type I and II children,
E346

Glucoregulatory hormones, mobilization of,
hypothalamic locomotor centers,
E722

Glucose

blood, turnover, exercise, E405

counterregulation, cortisol and, during
hypoglycemia, E35

enhanced response to corticosterone, ge-
netic obesity, E133

homeostasis, naloxone effects, insulin-
induced hypoglycemia, E367

kinetics

optimal sampling schedule, models,
E445

pulsatile delivery effects, E686

lipid interaction, time dependence of,
E49

metabolism

catecholamine effects, skeletal muscle,
E340

fuel-mediated teratogenesis, E269

sepsis effects, diabetes, E301

training effects, adipose cells, E520

oral and intravenous

 gluconeogenic formation after, E158

 hepatic glycogen formation after, E145

 output, liver, measured with labeled glu-
 cose, E531

 oxidation, mediating protein catabolism
 and, burns and sepsis, E323

 plasma, dose-response relations to insu-
 lin, bed rest effects, E43

 production and disposal, loss of first-
 phase insulin secretion and, liver,
 E241

 rapid vs. slow growth, gilts (pig), E554

 recycling, glycogenesis type I and II chil-
 dren, E346

 route of administration, glycogen reple-
 tion and, liver, E681

 synthesis, renal, mitochondrial carbonic
 anhydrase and, E791

 tolerance, diurnal fluctuation, E459

transport

 forearm, compartmental model, E943

 insulin resistance of, skeletal muscle,
 E418

 transporter systems, alterations, insulin-
 resistant uremia, E193

 uptake, exercise, E405

 utilization, obesity effects (sheep), E772

Glucose-galactose paradox, hepatic glyco-
gen synthesis, neonatal, E697

Glutamate, handling, liver, growth hor-
mone effects, E959

Glutamine

metabolism, skeletal muscle hypertro-
phy, E885

sources, parenteral nutrition, E228

synthesis, during fasting, ammonium
ions and, liver, E514

γ -Glutamyl, cycle, regulation of amino acid
translocation, E916

Glutathione, γ -glutamyl cycle, amino acid
metabolism and, E916

Glycogen

 hepatic, formation, direct pathway,
 E145, E158

liver

 repletion, protein intake effects, E212

 vagotomy effects, E855

 repletion, hepatic, route of glucose ad-
 ministration effects, E681

synthesis

 hepatic, glucose-galactose paradox in,
 neonate, E697

 insulin resistance of, skeletal muscle,
 E418

Glycogenolysis

 ATP utilization, skeletal muscle during
 tetanic contraction, E595

- Glycogenolysis (*continued*)
 hepatic, exercise-induced glucagon rise effects, E108
- Glycogen storage disease, glucose recycling, glycogenesis type I and II children, E346
- Glycylglutamine, metabolism, parenteral nutrition, E228
- GnRH: *see* Gonadotropin-releasing hormone
- Gonadotropin-releasing hormone, pulse frequency, control of menstrual cycle, E930
- Growth: *see also* Development
 lung, cAMP changes after partial pneumectomy, E261
 normal weight bearing after weightlessness, bone response, E606
 rapid vs. slow, insulin effects, gilts (pig), E554
- Growth hormone
 ethanol effects, during pregnancy, E561
 gluconeogenesis and, renal proximal tubule, E751
 glutamate handling and, hepatic, E959
 secretory rates, 24-h plasma concentration profiles, E809
- Growth hormone-releasing factor, rapid vs. slow growth, gilts (pig), E554
- Guanosine diphosphate, binding, adrenalectomy prevention of obesity, E139
- Guanosine monophosphate, cyclic prolactin, lactose biosynthesis and, E318
 secretion, ANP stimulation of, E675

H

- Heart
 creatine kinase enzyme activity and mRNA level, diabetes, E573
 plasma membrane-specific deficiency, streptozotocin diabetes, E127
 work, pacing stress effects, E309
- Hepatocytes, diabetic, phosphorylase synthesis in, E74
- Hormonal response, exercise, sensory nervous blockade and, E95
- Hormones: *see also* specific hormone concentration, ethanol effects, pregnancy, E561
 episodic signals, false-positive and false-negative errors, E88
 plasma concentration, controlled by secretory impulse frequency, E299
- Hydroxyproline, sex hormones, bone conservation and, E903
- 5-Hydroxytryptamine, ketamine and fentanyl effects, lung metabolism, E379
- Hyperglycemia, insulin secretion and action in, E180
- Hyperglycemic clamp
 glucose production and disposal, loss of first-phase insulin secretion and, E241
 hepatic glucose production during, E704
- Hyperinsulinemia, glucose production during, hepatic, E704
- Hyperlactatemia, lactate clearance during, endurance training enhancement of, E782
- Hyperosmolality, plasma ANF and, fetus (sheep), E466
- Hypertension, spontaneous, abnormal insulin metabolism after, E491
- Hypertonic solution, plasma ANF and, fetus (sheep), E466

- Hypoglycemia
 brain-pituitary-adrenal response to, development, E757
 glucose counterregulation, cortisol and, E35
 insulin-induced, naloxone effects on glucose, E367
 malformations induced by, fuel-mediated teratogenesis, embryo, E269
- Hypogonadism, hypogonadotropic, GnRH pulse frequency and, E930
- Hypothalamus
 development, response to hypoglycemia, E757
 locomotor centers, glucoregulatory hormones and, E722
 ventrolateral, obesity, development of, E255
- Hypothyroidism
 fetal, brown fat, fetal life and, E625
 maternal, brown fat, fetal life and, E625
- Hypoxia, conjugated catecholamine response to, fetus (sheep), E198

I

- Idazoxan, insulin release and, pancreatic islets, E439
- IGF-I: *see* Insulin-like growth factor I
- Impulse, secretory, control of plasma hormone concentration, E299
- Indomethacin, synthesis, vasopressin and angiotensin II interaction in, E617
- Insulin
 action
 diabetes, sepsis-induced changes, E301
 dietary protein intake effects, E212
 blood glucose turnover and, during exercise, E405
 degradation, kidney epithelial cells (opossum), E895
 5'-deiodinase and thyroid hormones, fetal brown fat, E625
 diabetes, impaired production of nerve growth factor, E400
 effects, glucose transport, forearm, compartmental model, E943
 enhanced response to corticosterone, genetic obesity, E133
 first-phase, loss effects on glucose production and disposal, hepatic, E241
 gastrin-releasing peptides and, E235
- hypoglycemia
 brain-pituitary-adrenal response to, E757
 naloxone effects on glucose, E367
- metabolism
 abnormal, spontaneous hypertension and, E491
 motor center activity and, E722
 training effects, adipose cells, E520
 obesity, adrenalectomy prevention of, E139
 oxidation, mediating protein catabolism and, burns and sepsis, E323
 plasma, changes, epinephrine thermogenesis and, E185
 portal, during exercise, hepatic vagus nerve effects, E855
 pulsatile delivery effects, E686
 rapid vs. slow growth rate, gilts (pig), E554
- receptors: *see* Receptors
- release
 diabetes, pancreatic islets, E439

- leucine effects, pancreas (chicken), E15
- membrane and intracellular effects of adenosine, E473
- pattern, during hyperglycemic clamp, E704
- resistance, time dependence of, E49
- response, glucose-induced, E361
- rise in glucagon, exercise-induced, E108
- secretion
 dose-response relations to insulin, bed rest effects, E43
 hyperglycemia and, E180
 norepinephrine inhibition of, islet, E923
 oscillatory, islets, E479
- sensitivity
 obesity effects (sheep), E772
 tissue, VMH obesity, E255
- suppression of whole body proteolysis, amino acids and, E839
- Insulin-like growth factor, gluconeogenesis and, renal proximal tubule, E751
- Insulin-like growth factor I, receptors for, proximal colon epithelial cell apical membranes, E27
- Intestine, epithelial cell apical membranes, receptors for IGF-I, E27
- Iodothyronine 5'-deiodinase, activity, brown fat, during fetal life, E625
- Islet hormones, release, β -endorphins, E361
- Isoproterenol
 kinetics, plasma clearance and, E743
 renin release stimulation by, endothelin effects, E833
- Isotopes
 stable
 glucocorticosteroid effects, E712
 ketogenesis and sepsis, E665

J

- Juxtaglomerular cells, renin release, endothelin effects, E833

K

- Ketamine, fentanyl and, lung metabolism, E379
- Ketogenesis, sepsis and, E665
- Ketosisocaproate, metabolism, reciprocal pool model, E385
- α -Ketosisocaproic acid, insulin release and, pancreas (chicken), E15
- Ketone body, flux, regulation, sepsis and, E665
- Kidney
 abnormal insulin metabolism, after spontaneous hypertension, E491
 glucose synthesis, mitochondrial carbonic anhydrase, E791
 metabolism, growth hormone stimulation, proximal tubule, E751
- Kidney cells, epithelial, degradation of insulin (opossum), E895
- Kidney tubules
 proximal
 glucose synthesis, E791
 growth hormone stimulation of gluconeogenesis, E751

L

- Lactate
 clearance, during hyperlactatemia, endurance training effects, E782

glycogen pathways and, hepatic, E145, E158
 plasma, rapid activation of gluconeogenesis after, E486
 threshold, exercise, E405
 Lactation: *see also* Fetus; Placenta; Pregnancy
 γ -glutamyl cycle, amino acid metabolism and, E916
 Lactogen, placental, ethanol effects, E561
 Leprechaunism, insulin receptors, radioimmunoassay, E451
 Leucine
 flux, carbohydrate overfeeding and, E413
 glucocorticosteroid effects, E712
 insulin and glucose oxidation effects, burns and sepsis, E323
 intracellular free, reciprocal pool model, E385
 turnover, averages of ratios, E125
 whole body protein synthesis and, E639
 L-Leucine, insulin release and, pancreas (chicken), E15
 Leukocytes
 mononuclear
 aldosterone and lymphocyte volume, E170
 during sodium restriction, E499
 Leydig cells, steroidogenesis in, nonesterified fatty acid modulation of, E937
 Lipid particles, triglyceride-rich, serum triglyceride response to, E860
 Lipids
 glucose interaction, time dependence of, E49
 metabolism
 norepinephrine inhibition of, islet, E923
 vitamin D₃-induced changes, monocyte-macrophages, E290
 Lipogenesis, tube feeding and, brown fat, E374
 Lipolysis
 adenylate cyclase and, α_1 -adenosine receptor-mediated inhibition, adipocytes, E871
 during fasting, β -adrenergic blockade effects, E65
 Lipoproteins
 metabolism, vitamin D₃-induced changes, monocyte-macrophages, E290
 very low density, after acute triglyceride administration, E860
 Liver
 abnormal insulin metabolism, after spontaneous hypertension, E491
 amino acid arteriovenous differences, fetus (lamb), E909
 glucose output, measured with labeled glucose, E531
 glucose production, escape, during hyperglycemic clamp, E704
 glucose production and disposal, loss of first-phase insulin secretion and, E241
 glucose uptake, diurnal fluctuations, E459
 glutamate handling, growth hormone effects, E959
 glutamine synthesis during fasting, ammonium ion effects, E514
 glycogen formation, direct pathway, E145, E158

glycogen repletion
 dietary protein intake effects, E212
 route of glucose administration effects, E681
 glycogen synthesis, glucose-galactose paradox in, neonate, E697
 glycogenolysis and gluconeogenesis, exercise-induced glucagon rise effects, E108
 thyroxine transport, model, E764
 vagus nerve, pancreatic hormone secretion during exercise and, E855
 Lung
 cAMP changes, after partial pneumonectomy, E261
 metabolism, ketamine and fentanyl effects, E379
 polyamine uptake, inflation-associated increases, E729
 Luteinizing hormone, fatty acids, steroidogenesis and, Leydig cells, E937
 Lymphocytes
 insulin receptors, radioimmunoassay, E451
 volume, aldosterone and, E170
 Lysine, whole body protein synthesis and, E639

M

Mammary gland, prolactin, lactose biosynthesis and, E318
 Membrane, ionic conductance, pituitary cells, arachidonic acid effects, E203
 Menstrual cycle, control of, GnRH pulse frequency and, E930
 Mental stress, norepinephrine release, muscle sympathetic activity and, E654
 Metabolic clearance, glucose, obesity effects (sheep), E772
 Metabolic rate
 epinephrine effects, changes in plasma insulin or glucagon and, E185
 transient reduction of, food restriction, E175
 Metabolic responses, exercise, sensory nervous blockade and, E95
 3-Methylhistidine, release, after exercise, soleus muscle, E1
 Metoclopramide, aldosterone secretion and, E588
 Minerals
 bone
 ion microprobe analysis, E815
 verapamil effects on vitamin D metabolism, E632
 metabolism, during pregnancy, E118
 Mineralocorticoids, volume regulation, lymphocytes, E170
 Models
 compartmental
 glucose transport, forearm, E943
 hepatic glycogen formation pathways, E145, E158
 dexamethasone stimulation, plasma inactive renin, E879
 glucose kinetics, optimal sampling schedule, E445
 plasma reciprocal pool, intracellular free leucine for protein synthesis, E385
 thyroxine transport, liver, E764
 Monocyte-macrophages, lipid metabolism, Vitamin D₃ effects, E290
 Monocytes, insulin receptors, radioimmunoassay, E451

Monosodium glutamate, obesity, adrenal-ectomy prevention of, E139
 Muscle
 abnormal insulin metabolism, after spontaneous hypertension, E491
 sympathetic activity, norepinephrine release and, during mental challenge, E654
 Muscle, skeletal
 fiber type and training of, β -adrenoceptor density and, E736
 hypertrophy, glutamine metabolism, E885
 insulin resistance glucose transport, selective reversal, E418
 tetanic contraction, ATP utilization during, E595
 thermogenesis, carbohydrate-induced, epinephrine effects, E340
 Muscle, smooth
 nonvascular, neuropeptide Y actions, genital tract, female, E220
 vascular, prostacyclin synthesis, E617
 Muscle fibers
 skeletal, type and training effects on β -receptor density, E736
 type
 composition, E823, E828
 proportion and enzyme activities, E567
 Myocardium, metabolism, pacing stress effects, E309
 Myometrium, desensitization of, oxytocin and prostaglandin, E20

N

Naloxone, glucose homeostasis and, insulin-induced hypoglycemia, E367
 Neonate, glucose-galactose paradox, hepatic glycogen synthesis, E697
 Nerve growth factor, impaired production, submandibular gland, diabetes and, E400
 Neuropeptide Y, biological action, genital tract, female, E220
 Nifedipine
 brown fat, during fetal life, E625
 synthesis, vasopressin and angiotensin II interaction in, E617
 Nitrogen
 blood urea, insulin resistance and, E193
 metabolism, during fasting, liver, E514
 Norepinephrine
 β -adrenergic receptor, during sodium restriction, E499
 biological action, genital tract, female, E220
 carbohydrate-induced thermogenesis and, skeletal muscle, E340
 conjugated, response to hypoxia, fetus (sheep), E198
 hormonal responses
 exercise, E95
 exercise, hepatic vagotomy and, E855
 insulin-induced hypoglycemia and, naloxone effects, E367
 kinetics, E743
 lipid metabolism, calcium uptake, and insulin secretion, islet, E923
 metabolism, motor center activity and, E722
 release, muscle sympathetic activity and, during mental challenge, E654
 renin release, neural stimulation of, ANF effects, E332

- Norepinephrine (*continued*)
 thyroxine, brown fat and cold, E81
 tube feeding and, brown fat, E374
 Nuclear magnetic resonance
 protein intake effects, insulin action,
 E212
 route of glucose administration, hepatic
 glycogen repletion and, E681
 Nucleotides
 adenine, cellular calcium and parathy-
 roid hormone secretion, E505
 cyclic, prolactin stimulation of lactose
 biosynthesis, E318
 Nutrition, parenteral, sources of glutamine
 for, E228

O

- Obesity
 genetic
 a₁-adenosine receptor-mediated inhibi-
 tion, adipocytes, E871
 enhanced response to corticosterone,
 E133
 insulin sensitivity and (sheep), E772
 offspring of obese patients, energy ex-
 penditure in, E647
 prevention, adrenalectomy and, E139
 ventrolateral hypothalamic, development
 of, E255
 Osmotic stimulation, central, vasopressin,
 ANP, and blood pressure response,
 E611
 Osteoblastic cells, phospholipase C and
 calcium, endothelin-1 activation,
 E797
 Osteopenia
 disuse, bone response to normal weight
 bearing after, E606
 sex hormones and, E903
 Osteoporosis, postmenopausal, sex hor-
 mone effects, E903
 Ouabain, brain sodium-potassium-ATPase
 differences, male-female, E284
 Ovulation, induction of, GnRH pulse fre-
 quency and, E930
 Oxidation
 lactate, endurance training effects, E782
 leucine, carbohydrate overfeeding and,
 E413
 Oxygen, consumption, dopamine effects,
 healthy men, E541
 Oxytocin, desensitization of, myometrium,
 E20

P

- Pacing, myocardial metabolism, coronary
 hemodynamics and, E309
 Palmitate, potentiation, insulin secretion,
 islet, E923
 Pancreas
 insulin release, leucine effects (chicken),
 E15
 perfusion, gastrin-releasing peptides and,
 E235
 Pancreatic cells
 β-
 glucose-stimulated insulin secretion,
 bed rest effects, E43
 membrane and intracellular effects of
 adenosine, E473
 Pancreatic hormone, secretion, during ex-
 ercise, hepatic vagus nerve effects,
 E855

- Pancreatic islets
 clamp, epinephrine thermogenesis and,
 E185
 insulin release from, α-adrenoceptors
 and, diabetes, E439
 lipid metabolism, calcium uptake, and
 insulin secretion, norepinephrine in-
 hibition, E923
 oscillatory insulin secretion, E479
 Parathyroid hormone
 adenine nucleotide inhibition of, E505
 calciotropic levels, during pregnancy,
 E118
 metabolic alkalosis effects, E578
 sex hormones, bone conservation and,
 E903
 verapamil effects, dietary calcium defi-
 ciency and, E632
 Pentose phosphate pathway, glutamine
 metabolism, skeletal muscle hyper-
 trophy, E885
 Peptides
 biological action, genital tract, female,
 E220
 bombesin-like, dissociated biological ac-
 tivities, E235
 Phenolamine, insulin release and, pan-
 creatic islets, E439
 Phenylalanine, whole body protein synthe-
 sis and, E639
 Phosphocreatine, ATP utilization, skeletal
 muscle during tetanic contraction,
 E595
 Phosphofructokinase, ATP utilization,
 skeletal muscle during tetanic con-
 traction, E595
 Phospholipase C, endothelin-1 activation,
 osteoblastic cells, E797
 Phosphorus, chronic metabolic alkalosis ef-
 fects, E578
 Phosphorylase
 ATP utilization, skeletal muscle during
 tetanic contraction, E595
 synthesis, diabetic hepatocytes and car-
 diomyocytes, E74
 Pituitary, response, cold acclimation and,
 E336
 Pituitary cells, membrane ionic conduct-
 ance, arachidonic acid effects, E203
 Placenta: *see also* Fetus; Lactation;
 Pregnancy
 amino acid arteriovenous differences, fe-
 tus (lamb), E909
 epithelial cell apical membranes, recep-
 tors for IGF-I, E27
 fetal response to prostacyclin, after
 angiotensin II-induced vasoconstric-
 tion (sheep), E102

Plasma

- clearance, norepinephrine kinetics and,
 E743
 constituents: *see* specific constituent
 Plasma concentration profiles, growth hor-
 mone secretory rates, E809
 Pneumectomy
 partial, lung cAMP changes after, E261
 polyamine uptake and, E729
 Polyamines
 cyclic nucleotides and, prolactin stimula-
 tion of lactose biosynthesis, E318
 uptake, lung, inflation-associated in-
 creases, E729
 Potassium, ion microprobe analysis, bone,
 E815

Potentials

- afterhyperpolarization, arachidonic acid
 and, pituitary cells, E203
 membrane, membrane and intracellular
 effects of adenosine, E473
 Prazosin, insulin release and, pancreatic is-
 lets, E439
 Pregnancy: *see also* Fetus; Lactation;
 Placenta
 ethanol consumption during, E561
 γ-glutamyl cycle, amino acid metabolism
 and, E916
 mineral metabolism during, E118
 Progesterone, brain sodium-potassium-
 ATPase differences, male-female,
 E284
 Prolactin
 placental, ethanol effects, E561
 stimulation of lactose biosynthesis,
 cyclic nucleotides and polyamines
 in, E318
 Prostacyclin
 placental response to, fetus (sheep),
 E102
 synthesis, vasopressin and angiotensin II
 interaction in, vascular smooth mus-
 cle, E617
 Prostaglandins, desensitization of, myo-
 metrium, E20
 Prostaglandin E, β-endorphin and islet
 hormone release, E361
 Protein
 breakdown and synthesis, amino acids
 and insulin suppression of, E839
 degradation, total and myofibrillar, so-
 leus muscle after exercise, E1
 intake, insulin action and, E212
 metabolism
 glucocorticosteroid effects, E712
 reciprocal pool model, E385
 packaging, calcium interaction with, ad-
 renal, E247
 synthesis, whole body, amino acid stud-
 ies, E639
 turnover
 carbohydrate overfeeding and, E413
 fiber-type composition of muscle and,
 E828
 Protein kinase C, endothelin-1 activation,
 osteoblastic cells, E797
 Proteolysis, whole body, amino acid aug-
 ments insulin's suppression of, E839
 Pseudohypoparathyroidism, abnormal cat-
 alytic adenylate cyclase, E277
 Pulmonary endothelium, metabolism, keta-
 mine and fentanyl effects, E379
 Pyruvate kinase, gluconeogenesis activa-
 tion, central carbachol, E486

R

- Radioisotopes, glucocorticosteroid effects,
 E712
 Receptors
 A₁-adenosine, inhibition of adipocyte ad-
 enylate cyclase and lipolysis, E871
 α-adrenergic, diabetes, pancreatic islets,
 E439
 β-adrenergic
 cardiac, plasma membrane-specific de-
 ficiency in diabetes, E127
 downregulation of, during sodium re-
 striction, E499
 fiber type and training effects, skeletal
 muscle, E736
 lipolysis during fasting, E65

- IGF-I, proximal colon epithelial cell apical membranes, E27
- insulin
kidney epithelial cells (opossum), E895
radioimmunoassay, E451
vasotocin, fluorescein- and rhodamine-labeled probes for (toad), E804
- Renin
plasma activity, epinephrine concentration effects, awake state, E57
plasma inactive, stimulation by dexamethasone, E879
release
inhibitory effect of endothelin, E833
neural stimulation of, ANF effects, E332
- Resistance
hormone, new form of pseudohypoparathyroidism, E277
- insulin
obesity effects (sheep), E772
selective reversal, skeletal muscle, E418
sepsis effects, diabetes, E301
- Respiration, carbon dioxide recovery, feeding effects, E426
- Rhythm, circadian, glucocorticoid, cortisol secretory burst, E6
- Ribonucleic acid, messenger, diabetes effects, heart, E573

S

- Saline, infusion, diminished response to epinephrine, elderly, E866
- Salivary gland, secretion, ANP stimulation of, E675
- Salt, depletion, ANH and aldosterone effects, E583
- Secretory proteins, adrenal, calcium interaction with, E247
- Sepsis
changes induced by, insulin action, diabetes, E301
ketone body flux regulation in, E665
mediating protein catabolism in, insulin and glucose role in, E323
- Serotonin, ketamine and fentanyl effects, lung metabolism, E379
- Sex differences
neuropeptide, genital tract, female, E220
sodium-potassium-ATPase, brain synaptosomes, E284
- Sodium
excretion
calcitonin and calcitonin gene-related peptide, E848
neural stimulation of, ANF effects, E332
urinary, ANH and aldosterone effects, E583
ion microprobe analysis, bone, E815
restriction, downregulation of β -adrenergic receptor-mediated function during, E499
- Sodium-potassium-ATPase, brain, sex differences, E284
- Soleus muscle
fiber-type composition, E823, E828
protein degradation, after exercise, E1

- Somatomedin, receptors for IGF-I, colon membranes, E27
- Somatostatin, glucose production during hyperinsulinemia, hepatic, E704
- Somatotropin release-inhibiting factor, glucose production during hyperinsulinemia, hepatic, E704
- Spaceflight, normal weight bearing after weightlessness, bone response, E606
- Spectrometry, secondary ion mass, bone, E815
- Spectroscopy, mass, glycogenosis type I and II children, E346
- Splanchnic tissues, glucose uptake, diurnal fluctuations, E459
- Steroidogenesis, Leydig cells, nonesterified fatty acid modulation of, E937
- Steroids, leucine oxidation and, E712
- Streptozotocin
diabetes
impaired production of nerve growth factor, E400
white adipose tissue regression in, E547
- Submandibular gland
diabetic, impaired production of nerve growth factor in, E400
synthesis, ANP stimulation of, E675
- Substrates
competition, time dependence of, E49
oxidation studies, isotopic dilution of carbon dioxide during, E296
- Sympathetic activity, muscle, norepinephrine release and, during mental challenge, E654
- Sympathetic nerve, activities, brown adipose tissue, tube feeding effects, E374
- Sympathetic nervous system, brown fat response to cold, thyroxine effects, E81

T

- Tensor fasciae latae, fiber-type composition, E823
- Teratogenesis, fuel-mediated, hypoglycemia-induced malformations, embryo, E269
- Testosterone
brain sodium-potassium-ATPase differences, male-female, E284
nonesterified fatty acid modulation of, Leydig cells, E937
- Theophylline, β -endorphin and islet hormone release, E361
- Thermogenesis
carbohydrate-induced, epinephrine effects, muscle, E340
corticosterone and, genetic obesity, E133
epinephrine, plasma insulin or glucagon changes and, E185
- Thermoregulation, obesity, adrenalectomy prevention of, E139
- Threonine, whole body protein synthesis and, E639
- Thyroxine
effect on thermogenic and trophic responses, brown adipose tissue, cold, E81
transport, liver, model, E764

- Tracer dilution technique, glucose output, liver, E531
- Triglycerides
metabolism, vitamin D₃-induced changes, monocyte-macrophages, E290
serum, triglyceride-rich lipid particle effects, E860
- Triiodothyronine, effect on thermogenic and trophic responses, brown adipose tissue, cold, E81
- Trypsinlike enzyme, vasopressin metabolized by, amniotic fluid (guinea pig), E354
- Tyrosine
release, after exercise, soleus muscle, E1
whole body protein synthesis and, E639

U

- Urea
insulin and glucose oxidation effects, burns and sepsis, E323
production, liver, growth hormone effects, E959
- Uremia, insulin-resistant, alterations in glucose transporter systems in, E193
- Uterus, motility, prostaglandins and oxytocin, E20

V

- Vagotomy, hepatic, hormonal response to exercise and, E855
- Vagus nerve, hepatic, pancreatic hormone secretion and, during exercise, E855
- Vasoconstriction, angiotensin-II-induced, placental response to prostacyclin and, fetus (sheep), E102
- Vasopressin: *see also* Antidiuretic hormone
angiotensin II interaction and, prostacyclin synthesis, vascular smooth muscle cells, E617
metabolism, trypsinlike enzyme and, amniotic fluid, E354
response, central osmotic stimulation, E611
- Vasotocin, receptors: *see* Receptors
- Verapamil, oral, vitamin D metabolism and, E632
- Veratridine, brain sodium-potassium-ATPase differences, male-female, E284
- Vitamin D
metabolism, oral verapamil and calcium effects, E632
mineral metabolism and, pregnancy, E118
- Vitamin D₃
1,25-dihydroxy-bone surface elements, E815
lipid metabolism and, monocyte-macrophages, E290
metabolic alkalosis effects, E578
- VMH: *see* Hypothalamus, ventrolateral
- Volume, regulation, lymphocytes, aldosterone and, E170

W

- Weightlessness, normal weight bearing after, bone response, E606
- Work, muscular, exercise-induced rise in glucagon, E108

Author Index to Volume 20

- Abe, K., E611
 Abumrad, N. N., E228, E367, E514, E839
 Adibi, S. A., E228
 Albert, A., E686
 Albertsson-Wikland, K., E809
 Andersen, D. K., E704
 Armanini, D., E170
 Armstrong-Backus, C. S., E20
 Arnal, M., E639
 Astrup, A., E340
 Atchison, J. A., E27
 Azhar, S., E491
- Bach, F. W., E95
 Baillie, A. G. S., E823, E828
 Barre, F., E639
 Barrett, D., E277
 Barstow, T. J., E405
 Battaglia, F. C., E909
 Beaufre, B., E712
 Bellina, C. R., E309
 Benhaïem, H., E180
 Benson, S. J., E937
 Bergman, E. N., E772
 Bergner, A., E405
 Bergstrom, R. W., E479
 Bertrand, G., E473
 Beylot, M., E665
 Bier, D. M., E185
 Bihoreau, M. T., E180
 Bikle, D. D., E606
 Boam, W. D., E937
 Bogardus, C., E647
 Boheler, K. R., E573
 Bohlin, G., E654
 Bolli, G. B., E35
 Bonadonna, R., E943
 Bonadonna, R. C., E49
 Boni, C., E49, E309
 Born, W., E448
 Bouchard, C., E567
 Bouletreau, P., E665
 Bozem, M., E473
 Brace, R. A., E466
 Breazile, J. E., E554
 Breitenstein, E., E541
 Breslau, N. A., E277
 Brown, G., E531
 Brown, L. L., E839
 Brunetti, A., E451
 Brunetti, P., E35
 Buchanan, D. S., E554
 Bukowiecki, L. J., E547
 Buku, A., E804
 Bulow, J., E340
 Burke, J. F., E426
 Burnell, E. E., E198
 Buse, M. G., E418
 Bushinsky, D. A., E578, E815
 Buzzigoli, G., E309
- Calvo, R., E625
 Camici, P., E309
 Campaniello, E., E930
 Campbell, R. G., E413
 Cardin, S., E855
 Carr, A. M., E379
- Carroll, R. G., E57
 Cattaneo, A. G., E439
 Ceriello, A., E361
 Cersosimo, E., E514
 Chabala, J. M., E815
 Chandler, W., E588
 Cherian, K., E791
 Cherrington, A. D., E108
 Cheung, C. Y., E466
 Chiolerò, R., E541
 Christensen, N. J., E340, E743
 Claybaugh, J. R., E354
 Cobelli, C., E444, E943
 Coggan, A. R., E736
 Cohn, D. V., E247
 Colburn, C. A., E108
 Collins, J. C., E124
 Cone, C. M., E606
 Cooper, D. M., E405
 Corlett, R. E., E772
 Cozzolino, D., E361
 Cryer, P. E., E185
- Daleskog, M., E654
 De Feo, P., E35
 DeFronzo, R. A., E241
 DeFronzo, R. A., E943
 DeFronzo, R. A., E49, E212
 De Haën, C., E479
 Dela, F., E43
 Delday, M. I., E823, E828
 Della-Santina, C. R., E632
 De Nicolao, G., E299
 De Teresa, A., E459
 Di Chiara, G., E459
 Dillmann, W. H., E573
 Dobrescu, C., E301
 Dodgson, S. J., E791
 Doiron, B., E855
 Dolci, W., E617
 Donovan, C. M., E782
 Downs, R. W., Jr., E277
 Doxey, J. C., E439
 Dufy, B., E203
 Dutton, S. L., E418
- Efendic, S., E439
 Eggena, P., E588, E804
 Eiler, H., E20
 Elahi, D., E704
 Escobar del Rey, F., E625
- Fagius, J., E654
 Fanelli, C., E35
 Fasulo, J. M., E860
 Favus, M. J., E578
 Ferrannini, E., E49, E309, E943
 Ferrari, P., E930
 Ferré, P., E255
 Fielder, P. J., E561
 Filicori, M., E930
 Fischer, J. A., E848
 Flakoll, P. J., E839
 Flamigni, C., E930
 Forman, A., E220
 Fox, J., E632
 Frank, B., E895
 Fraser, C. L., E284
- Frexes-Steed, M., E839
 Freymond, D., E647
 Freyschuss, U., E654
 Fujimoto, W. Y., E479
 Fuller, S. P., E520
- Galbo, H., E43, E95, E722
 Ganapathy, V., E27
 Garlick, P. J., E823, E828
 Garnache, A. K., E74
 Garofalo, M. A. R., E486
 Gattoni, A., E459
 Geer, R., E514
 Gelfand, R., E943
 Gélou, A., E547
 Gerber-Wicht, C., E617
 Gerich, J. E., E35, E712
 Ghishan, F., E514
 Giugliano, D., E361
 Glorioso, N., E879
 Gnaedinger, M. P., E848
 Gold, E., E903
 Goldfine, I. D., E451
 Goldstein, R. E., E108
 Goodman, P. A., E451
 Goodyear, L. J., E520
 Gorr, S.-U., E247
 Goulding, A., E903
 Grau, G., E665
 Grekin, R. J., E866
 Groth, T., E809
 Grubb, D. A., E823, E828
 Guiraud, M., E665
 Gutman, A., E346
- Habara, Y., E336
 Halloran, B. P., E606
 Halter, J. B., E499, E866
 Haluska, M., E290
 Hammerman, M. R., E751
 Haskell, J. F., E27
 Hayes, G. R., E193
 Haymond, M. W., E385, E712
 Heisler, S., E675
 Henquin, J. C., E473
 Henriksen, J. H., E743
 Hernandez, A., E625
 Hernandez, R., E916
 Herndon, D. N., E323
 Hill, J. O., E839
 Hill, T. J., E866
 Himms-Hagen, J., E81, E133, E139
 Hirshman, M. F., E520
 Hisa, H., E332
 Hjerdahl, P., E654
 Hoerr, R. A., E426
 Holland, O. B., E65
 Horber, F. F., E385, E712
 Horber-Feyder, C. M., E385
 Horton, E. D., E520
 Horton, E. S., E520
 Hourani, H., E367, E839
 Humme, J. A., E198
 Hunter III, E. S., E269
- Iitake, K., E611
 Inoue, M., E611
- Iranmanesh, A., E6
 Iwamoto, G. A., E722
- Jacobs, D. B., E193
 Jahoor, F., E323
 Jaspers, S. R., E74
 Jeandel, L., E675
 Jéquier, E., E541
 Johnson, M. L., E6, E88
 Jørgensen, J. C., E220
 Joshi, S., E959
- Kalderon, B., E346
 Kandé, J., E255
 Karl, H. W., E729
 Karl, I. E., E751
 Kasayama, S., E400
 Kashiwagi, A., E127
 Kasperek, G. J., E1
 Kawai, K., E235
 Kelso, T. B., E885
 Kettelhut, I. C., E486
 Kida, Y., E127
 Kien, C. L., E296
 Kimura, T., E611
 Kinebanyan, M. F., E255
 Kittaka, M. K., E578
 Kivlighn, S. D., E57
 Kjær, M., E95
 Klassen, G. A., E309
 Klein, S., E65
 Kliegman, R., E697
 Klim, C. M., E871
 Kodama, M., E127
 Korman, S. H., E346
 Kosz, L. M., E505
 Krayser, S., E385
 Ktorza, A., E180
 Kuhl, S., E170
 Kulaylat, M., E839
 Kunst, C., E697
 Kuroshima, A., E336
- L'Abbate, A., E309
 Lacy, D. B., E108, E367
 Lairmore, T., E514
 Lang, C. H., E301
 Langman, C. B., E578
 LaNoue, K. F., E871
 Lapidot, A., E346
 Larson, K., E647
 Laslow, K. S., E261
 Laury, M. C., E180
 Lavoie, J.-M., E855
 Lee, C. M., E491
 Lee, W.-N. P., E405
 Lefebvre, P. J., E686
 Leibach, F. H., E27
 Levi-Setti, R., E815
 Levy, J. C., E531
 Libre, E., E809
 Linares, O. A., E499
 Liu, X.-H., E937
 Livingston, R. R., E379
 Lizaralde, G., E6
 Lochs, H., E228
 Lockwood, D. H., E193
 Lohmeier, T. E., E57

- Lorenzoni, R., E309
 Lundberg, L.-O., E809
 Luzi, L., E241
 Lyke, W. A., E20
- Maddux, B. A., E451
 Madeddu, P., E879
 Madsen, J., E340
 Maltin, C. A., E823, E828
 Manunta, P., E879
 Marconi, A. M., E909
 Marfaing-Jallat, P., E255
 Marraccini, P., E309
 Marsh, H. M., E712
 Martin, D. C., E379
 Martin, L. F., E871
 Martinez, A. M., E198
 Martin III, W. H., E736
 Martino, C., E459
 Marzilli, M., E309
 Masur, S., E804
 Matsuoka, H., E833
 Matthews, D., E712
 Matthews, D. E., E185, E413
 Matthews, D. R., E531
 Max, S. R., E885
 Maxwell, C. V., E554
 May, M. E., E124
 McCarron, D. A., E290
 McCarter, D. R., E175
 McGee, J. R., E175
 McKenzie, J., E203
 McVie, R., E959
 Meikle, A. W., E937
 Melis, M. G., E879
 Mendel, C. M., E764
 Menelly, G. S., E704
 Meriggola, M. C., E930
 Meschia, G., E909
 Michelacci, L., E930
 Migliorini, R. H., E486
 Mikines, K. J., E43
 Miller, S. C., E118
 Miller, T. B., Jr., E74
 Millward, D. J., E639
 Minaker, K. L., E704
 Miner, L. K., E466
 Minokoshi, Y., E374
 Mitchell, J. H., E722
 Miyoshi, H., E323
 Molinoff, P. B., E277
 Mondon, C. E., E491
 Morchoisne, O., E290
 Morey-Holton, E., E606
 Morganroth, G. S., E866
 Morin, J., E255
 Morreale de Escobar, G., E625
 Morrier, E., E675
 Morrow, L. A., E866
 Morse, E. L., E228
 Mount, D. B., E81
 Muff, R., E848
 Mukai, H., E235
 Munekata, E., E235
- Nair, K. S., E413
 Namiki, M., E336
- Nash, J. A., E367
 Nemeth, E. F., E505
 Nishio, Y., E127
 Nørgård, M., E220
 Norton, S. A., E554
- Obled, C., E639
 Obregón, M. J., E625
 Ogren, L., E561
 Ohmori, H., E235
 Ohta, M., E611
 Ohue, Y., E797
 Oka, T., E400
 Oppat, C. A., E318
 Östenson, C.-G., E439
 Ota, K., E611
 Ottesen, B., E220
- Padbury, J. F., E198
 Pagliassotti, M. J., E782
 Pála, F., E879
 Palacin, M., E916
 Paolisso, G., E361, E686
 Papa, V., E451
 Pareschi, A., E930
 Parisi, V. M., E102
 Park, I. R. A., E81
 Patton, G. M., E860
 Pazzola, A., E879
 Penicaud, L., E180, E255
 Perriello, G., E35
 Perski, A., E654
 Peters, E. J., E65
 Petit, P., E473
 Pezzino, V., E451
 Picon, L., E180, E255
 Pillion, D. J., E27
 Pinto, M., E459
 Popovich, B. K., E573
 Puertes, I. R., E916
 Puntoni, R., E309
- Quan-Sheng, D., E118
- Rabkin, R., E491, E895
 Radosevich, P. M., E367
 Radziuk, J., E145, E158
 Rannels, D. E., E261, E729
 Rannels, S. R., E261
 Rascher, W., E848
 Ravussin, E., E647
 Reaven, G. M., E491
 Reulein, S. S., E772
 Rideau, N., E15
 Rillema, J. A., E318
 Rizk, N., E367
 Robins, S. J., E860
 Robins, V. F., E860
 Robledo, D. O., E561
 Rocchetti, M., E299
 Rogers, S. A., E751
 Rosberg, S., E809
 Roselino, J. E. S., E486
 Rosen, S. G., E499, E866
 Rossetti, L., E212, E681
 Rothman, D. L., E212
- Roullet, J.-B., E290
 Rowe, J. W., E704
 Roy, P. E., E547
 Ruggeri, A., E444
 Ruiz de Oña, C., E625
 Rulfs, J., E74
 Russo, L. A., E261, E729
 Ruttimann, Y., E541
 Rybicki, K. J., E722
- Saccomani, M. P., E943
 Sadler, T. W., E269
 Saeki, Y., E127
 Saffitz, J. E., E736
 Saito, M., E374
 Salvatore, T., E361
 Sanfield, J. A., E866
 Santeusano, F., E35
 Sarnacki, P., E284
 Sato, A. K., E354
 Sato, K., E611
 Satoh, S., E332
 Scheen, A. J., E686
 Schutz, Y., E541
 Schwartz, T. W., E220
 Schwenk, W. F., E385, E712
 Secher, N. H., E95
 Sekiya, C., E336
 Sessions, N. De V., E606
 Sha, S. G., E848
 Shangraw, R. E., E323
 Shear, C. R., E885
 Sheikh, S., E95
 Sheikh, S. P., E220
 Shenker, Y., E583
 Shigetani, Y., E127
 Shimazu, T., E374
 Shioi, J., E247
 Shoji, M., E611
 Shulman, G. I., E212, E681
 Simon, J., E15
 Simoneau, J.-A., E567
 Simonsen, L., E340
 Smadja, C., E255
 Smith, M. J., E499
 Smith, M. J., Jr., E57
 Snider, R. D., E1
 Soro, A., E879
 Sowell, M. O., E418
 Spalding, J. A., E108
 Sparks, J. W., E909
 Spina, R. J., E736
 Spriet, L. L., E595
 Staten, M. A., E185
 Stern, N., E588
 Stringham, J. D., E937
 Suzuki, S., E235
- Takagi, M., E833
 Takasugi, Y., E336
 Takuwa, N., E797
 Takuwa, Y., E797
 Talamantes, F., E561
 Tamarit-Rodriguez, J., E923
 Teller, D. C., E479
 Thio, S. L., E198
 Tokuyama, K., E133, E139
- Tomura, Y., E332
 Tonolo, G., E879
 Torella, R., E361
 Torello, F., E459
 Torlone, E., E35
 Treutelaar, M. K., E451
 Trindade, C., E697
 Trischitta, V., E451
 Troffa, C., E879
 Tronier, B., E43
 Truglia, J. A., E193
 Tsukada, H., E833
 Tuck, M. L., E588
 Turner, R. C., E531
- Uehara, A., E336
 Uehlinger, D. E., E848
 Urban, R. J., E88
 Uyehara, C. F. T., E354
- Vacher, P., E203
 Valdiserri, A., E930
 Vallotton, M. B., E617
 Vannucci, S. J., E871
 Vara, E., E923
 Veldhuis, J. D., E6, E88, E299
 Ventura, M. M., E35
 Verrillo, A., E459
 Verrillo, L., E459
 Vigneri, R., E451
 Viña, J., E916
 Viña, J. R., E916
 Vissing, J., E722
- Wagner, D. A., E426
 Wallfish, H., E323
 Wallin, B. G., E654
 Walsh, S. W., E102
 Wardzala, L. J., E520
 Wasserman, D. H., E108
 Watkins, C. A., E379
 Wax, M. B., E277
 Wehling, M., E170
 Weidmann, P., E848
 Weisinger, J. R., E578
 Welbourne, T., E959
 Welle, S., E413
 Widmaier, E. P., E757
 Williams, J. A., E451
 Williams, P., E514
 Williams, P. E., E228, E367
 Wolfe, R. R., E65, E323
 Wronski, T. J., E606
 Wüthrich, R. P., E617
- Yagi, S., E833
 Yagil, C., E895
 Yamamoto, T., E611
 Yamashita, K., E235, E797
 Yang, H. M., E57
 Yasujima, M., E611
 Yoshinaga, K., E611
 Young, V. R., E426
 Yu, Y.-M., E426
- Zavy, M. T., E554
 Zych, K., E49

